What we Claim is:

1. Image processing apparatus configured to store image data with redundant protection, comprising

input means configured to receive an input stream of real-time digital video data;

storage means for storing image data; and

processing means arranged to perform processing operations upon said image data, wherein

said input means receives an input stream of real-time digital video data;

said processing means performs a first writing operation to write said video data to said storage means in real-time without parity;

said processing means performs a reading operation to read said data from said storage means, perform a data manipulation upon said video data and generate parity information to create protected video data; and

said processing means performs a second writing operation to write said protected video data to said storage means.

2. Apparatus according to claim **1**, wherein said real-time digital data represents high definition images defined by luminance samples and colour difference samples.

3. Apparatus according to claim **1**, wherein said high definition digital video data is derived by scanning cinematographic film.

4. Apparatus according to claim **1**, wherein said real-time digital

video data represents standard broadcast television images defined by luminance and colour difference signals.

5. Apparatus according to claim **2**, wherein said luminance samples and said colour difference samples are converted to three colour samples before performing said writing step.

6. Apparatus according to claim **4**, wherein said data manipulation step includes converting luminance plus colour difference signals into three colour samples.

7. Apparatus according to claim **1**, wherein said data manipulation step includes generating reduced bandwidth proxy images and writing said proxy images to storage.

8. A method of processing image data to provide redundant protection, comprising the steps of

receiving an input stream of real-time digital video data;

performing a first writing step to write said video data to disk storage without parity in real-time to implement a video capture;

reading said video data from storage;

performing a data manipulation upon said data read from storage;

calculating redundant parity data to generate protected image data; and

performing a second writing step to write said protected image data to storage.

9. A method according to claim **8**, wherein said real-time digital data represents high definition images represented by luminance samples and colour different samples.

10. A method according to claim **9**, wherein said high definition digital video data is derived by scanning cinematographic film.

11. A method according to claim **8**, wherein said real-time digital video data represents standard broadcast television images represented by luminance and colour difference signals.

12. A method according to claim **8**, wherein said luminance samples and said colour difference samples are converted to three colour (RGB) samples before performing said writing step.

13. A method according to claim **8**, wherein said data manipulation step includes converting luminance plus colour difference signals into three colour (RGB) samples.

14. A method according to claim **8**, wherein said data manipulation step includes generating reduced bandwidth proxy images and writing said proxy images to storage.

15. A computer-readable medium having computer-readable instructions executable by a computer such that, when executing said instructions, a computer will perform the steps of:

receiving an input stream of real-time digital video data;

performing a first writing step to write said video data to disk storage without parity in real time to implement a video capture;

reading said video data from storage;

performing a data manipulation upon said data read from said storage;

calculating redundant parity data to generate protected image data; and

performing a second writing step to write said protected image data to storage.

16. A computer-readable medium having computer-readable instructions according to claim **15**, such that when executing said instructions, a computer will also perform the step of converting samples representing luminance and colour difference to three colour (RGB) samples before performing said first writing step.

17. A computer-readable medium having computer-readable instructions according to claim **15**, such that when executing said instructions, a computer will also perform the step of converting luminance plus colour difference signals into three colour (RGB) samples during said data manipulation step.

18. A computer-readable medium having computer-readable instructions according to claim **15**, such that when executing said instructions, a computer will also perform the steps of generating reduced bandwidth proxy images and writing said proxy images to storage during said data manipulation step.

19. A computer system programmed to execute stored instructions such that in response to said stored instructions said system is configured to:

receive an input stream of real-time digital video data;

perform a first writing step to write said video data to disk storage without parity in real-time to implement a video capture;

read said video data from storage;

perform a data manipulation upon said data read from storage;

calculate redundant parity data to generate protected image data; and

perform a second write step to write said protected image data to storage.

20. A computer system programmed to execute stored instructions according to claim **19**, wherein said data manipulation process generates reduced bandwidth proxy images and write said proxy images to storage.